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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,543	02/28/2002	Alan B. Shuey	020014	9808

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EXAMINER
CHAN, KO HUNG

ART UNIT	PAPER NUMBER
3632	

DATE MAILED: 04/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/085,543	SHUEY, ALAN B.	
	Examiner	Art Unit	
	Korie H. Chan	3632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 January 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3-22* is/are pending in the application.

4a) Of the above claim(s) *2,6,7,11-13 and 17-22* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3-5,8-10 and 14-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 3, line 6, "the vertical position" lacks antecedent basis.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 8, 14, and 15 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Redman et al'890 in view of Arakawa'698. Redman discloses a clamp for a support system to suspend an object from an overhead beam comprising a C-clamp (11) with a threaded fastener (12) threadingly received within one of the leg (11) of the clamp, and a vertical bore (10A) receiving a suspended strap, means to restrict downward vertical movement (17) of the suspended strap relative to clamp body. However, Redman does not provide cable with its corresponding means to restrict downward movement as being a conical bore with wedge device cooperating therewith and a lock nut. Arakawa teaches a cable retention wedge system comprising

a vertical bore (11) with a conical lower end portion (9), a wedge retainer (8) vertically movable within the bore, wedges (5) retained by the wedge retainer to contact a cable (W) within the bore and to be forced against the cable by the conical end portion of the bore when the retainer is at the lower part of the bore, and a spring (10) to urge the wedge retainer downwardly relative to the bore; wherein the cable is adjusted by forcing the cable upwardly from the bottom of the bore to release the wedges and permit movement of the cable, the wedge retainer has a threaded portion (19a) protruding below the bore with a lock nut (19) threaded onto the wedge retainer lower portion so that after the cable is positioned within retainer at the desired height, the lock nut is tightened to lock the wedge retainer and prevent movement of the wedge retainer relative to the bore. It would have been obvious to one of ordinary skill in the art to modify the hanger and wedge assembly of Redman such that the strap is of a cable type for engagement with the cable retention wedge system of Arakawa. Such modification would have involved a mere substitution of one well-known cable suspension and wedging retainer assembly for another known device which is well within the ambit of one of ordinary skill in the art.

Claims 9, 10, and 16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Redman et al'890 in view of Arakawa'698 as applied to claim 8 above, and further in view of Sword'792. Redman and Arakawa combined disclosed all the claimed features of applicant's invention except for a cable of the type having a permanent loop formed on one end and passing the other end around the object and through the formed loop and threading the cable into the vertical bore. Sword teaches

suspending an objecting via a cable (32) of the type having a permanent loop (figure 1, not labeled) formed on one end and passing the other end (34, fig. 5) around the object (12) and through the formed loop and placing the cable into the vertical bore (70b) of the suspension assembly. It would have been obvious to one of ordinary skill in the art to modify the object securing means of Redman and Arakawa combined such that it is of the permanent loop type at one end and threaded therethrough by the other end of the loop as taught by Sword for engagement with the vertical bore of Redman and Arakawa combined to facilitate a quick mounting and securing system.

Claims 3-5, 8, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirt'161 in view of Arakawa'698. Hirt'161 discloses a clamp for a support system to suspend an object from an overhead beam comprising a C-clamp (24, fig. 2) with a threaded fastener (22) threadingly received within one of the leg (20) of the clamp, and a vertical bore (21) **through the vertical portion of the "C" clamp** for receiving a suspended rod (26), means to restrict downward vertical movement (threads in bore) of the suspended rod relative to clamp body. However, Hirt does not a cable type support with a means to restrict as being a conical bore with wedge device cooperating with the cable and a lock nut.

Examiner takes official notice that using cables to support objects are notoriously old and well-known as demonstrated.

Arakawa teaches a cable retention wedge system comprising a vertical bore (11) with a conical lower end portion (9), a wedge retainer (8) vertically movable within the bore, wedges (5) retained by the wedge retainer to contact a cable (W) within the

bore and to be forced against the cable by the conical end portion of the bore when the retainer is at the lower part of the bore, and a spring (10) to urge the wedge retainer downwardly relative to the bore; wherein the cable is adjusted by forcing the cable upwardly from the bottom of the bore to release the wedges and permit movement of the cable, the wedge retainer has a threaded portion (19a) protruding below the bore with a lock nut (19) threaded onto the wedge retainer lower portion so that after the cable is positioned within retainer at the desired height, the lock nut is tightened to lock the wedge retainer and prevent movement of the wedge retainer relative to the bore. It would have been obvious to one of ordinary skill in the art to modify the rod suspension system of Hirt'161 such that it is of a cable type with a corresponding cable retention wedge system of Arakawa since suspending objects via cables are old and well-known in the art. Further, such modification would have involved a mere substitution of one well-known suspension system for another known device which is well within the ambit of one of ordinary skill in the art.

Claims 9, 10, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirt'161 in view of Arakawa'698 as applied to claim 8 above, and further in view of Sword'792. Hirt and Arakawa combined disclosed all the claimed features of applicant's invention except for a cable of the type having a permanent loop formed on one end and passing the other end around the object and through the formed loop and threading the cable into the vertical bore. Sword teaches suspending an objecting via a cable (32) of the type having a permanent loop (figure 1, not labeled) formed on one end and passing the other end (34, fig. 5) around the object (12) and

through the formed loop and placing the cable into the vertical bore (70b) of the suspension assembly. It would have been obvious to one of ordinary skill in the art to modify the object securing means of Redman and Arakawa combined such that it is of the permanent loop type at one end and threaded therethrough by the other end of the loop as taught by Sword for engagement with the vertical bore of Redman and Arakawa combined to facilitate a quick mounting and securing system.

Response to Arguments

Applicant's arguments filed 1/29/2003 have been fully considered but they are not persuasive. In response to applicant's argument that "there is no way that a flat strap (of Redman) can be used with the locking device of Arakawa'698", examiner would like to point out that the obvious modification to Redman stated in the office action is NOT to simply place the locking device on Arakawa to secure the strap. The modification would have been using the locking device as well as its corresponding cable support of Arakawa in place of the strap and its corresponding locking device of Redman. Indeed, cable supports are notoriously old and well-known in the art. One of ordinary skill in the art would have had the knowledge at the time the invention was made that objects can be suspended via straps, cables, ropes etc... as demonstrated by the various cited art of record and that they are obvious and well-known substitutes of one another. And to substitute one well-known suspension means such as the strap of Redman for another such as the cable of Arakawa would have been obvious and well within the ambit of one of ordinary skill in the art. In response to applicant's argument

that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hollinger et al'070 and Santa Cruz et al further demonstrate that it is old and well-known to have suspension means of the cable or rope type.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Korie H. Chan whose telephone number is 703-305-8079. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Les Braun can be reached on 703-308-2156. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3597 for regular communications and 703-305-3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Korie H. Chan
Primary Examiner
Art Unit 3632

khc
April 2, 2003